

REMARKS

Claims in the case are 1-3 and 6-14. No claims have been amended, and no claims have been cancelled in the present response.

Applicants note with appreciation, the withdrawal of the previous rejections under 35 U.S.C. §112, first and second paragraphs.

Claims 1-3 and 6-14 stand rejected under 35 U.S.C. §103(a) as being unpatentable over International Application Publication Number WO 94/14587 (Gilman) in view of European Patent Specification No. EP 0 589 343 B1 (Benz et al). This rejection is respectfully traversed with regard to the following remarks.

The article of Applicants' claims includes a specific sequence of layers (a) through (e) with an optional layer (f). For purposes of illustration, the specific sequence of layers (a)-(e) of Applicants' claimed article are represented diagrammatically as follows.

(a)	a surface layer of, for example, PMMA*;
(b)	a solid thermosetting polyurethane layer;
(c)	a crosslinked polyurethane elastomer layer;
(d)	a polyurethane foam layer; and
(e)	a solid thermosetting polyurethane layer;

* PMMA = polymethylmethacrylate.

Applicants wish to point out that the polyurethane foam layer (d) underlying the surface layer (a) is itself sandwiched between two separate layers that do not include surface layer (a), i.e., between the crosslinked polyurethane elastomer layer (c) and the solid thermosetting polyurethane layer (e). In addition, each layer underlying surface layer (a) is a crosslinked / thermoset layer. Further, crosslinked polyurethane elastomer layer (c) is not adjacent to the surface layer (a), as the solid thermosetting polyurethane layer (b) is interposed there-between.

Gilman disclose a layered structure that is prepared by spraying two part liquid resin polymers that chemically react and become solid, and which may be formed into bathtubs and automobile parts (abstract). Gilman discloses spraying the reactive polymers onto a solid support / substrate, e.g., a mold, and then

removing the formed layers from the solid support / substrate (page 5, line 35 to page 7, line 35). The thermosetting resins of the layered structure are disclosed by Gilman as being preferably elastomeric, and include polyureas, polyurethanes and polyesters (page 4, lines 11-29). The layered structure of Gilman is further disclosed as optionally including a foam layer (page 5, lines 10-18).

In examples 1 and 2, Gilman discloses the formation of a three-layered structure in which the polyurethane foam layer is adjacent to each thermoset polyurethane surface layer, which is represented as follows.

thermoset polyurethane layer | polyurethane foam layer | thermoset polyurethane layer.
See page 11 and 12. In example 2, Gilman discloses the above three-layered structure on a substrate, which is a truck-bed (page 12-13).

Gilman, however, does not disclose, teach or suggest a multilayered article that includes a surface layer comprising at least one of PMMA, ABS, polycarbonate, polystyrene, polyvinylchloride and ASA. In particular, Gilman does not disclose, teach or suggest a multilayered article that includes both: (i) a surface layer comprising at least one of PMMA, ABS, polycarbonate, polystyrene, polyvinylchloride and ASA; and (ii) an underlying layer of PU foam that is itself sandwiched or embedded in the following sequence of layers: a solid thermosetting PU layer; a crosslinked PU elastomer layer; the PU foam layer; and a solid thermosetting PU layer.

Benz et al disclose a 3-dimensional tub or bowl-shaped body which includes a plurality of plastic layers, and has a convex side and a concave side. See the description on page 2 of the English translation of Benz et al which is included in the appendix herewith. The 3-dimensional bowl-shaped body of Benz et al is disclosed as including, a concave side that is defined by a layer of PMMA, a convex side that is defined by a reinforcing layer of rigid crosslinked polyurethane (which may be in the form of a foam), and a tie or adhesive layer of an uncrosslinked flexible [elastomeric] polymer there-between. See the English Dialog abstract of Benz et al, and the description on page 2 of the English translation, and the second full paragraph on page 3 of the English translation of Benz et al. The structure of Benz et al's 3-dimensional bowl-shaped body is represented as follows.

PMMA layer | uncrosslinked elastomeric PU adhesive layer | PU foam layer

The crosslinked polyurethane elastomer layer (c) of Applicants' claimed article is not adjacent to the surface layer (a), the solid thermosetting layer (e) or the optional substrate / surface layer (f). Benz et al disclose the uncrosslinked elastomeric layer of their 3-dimensional bowl-shaped body as being necessarily adjacent to the concave PMMA surface layer.

Neither Gilman nor Benz et al disclose, teach or suggest the improved physical properties (e.g., impact resistance) that are provided by the multilayered articles of Applicants' present claims, which include both (i) a surface layer, and (ii) an underlying sandwiched polyurethane foam layer, as described more particularly above. Attention is directed to the examples of Applicants' specification in which Comparative Examples A and B (which include a surface layer but do not include an underlying sandwiched polyurethane layer) have markedly reduced impact resistance relative to Example C which is in accordance with Applicants' invention, and includes a surface layer of PMMA, an underlying sandwiched polyurethane foam layer, and a crosslinked polyurethane elastomer layer that is separated from the PMMA surface layer by an intervening solid thermosetting polyurethane layer.

As discussed previously herein, Gilman does not disclose, teach or suggest a multilayered article that includes both: (i) a surface layer comprising at least one of PMMA, ABS, polycarbonate, polystyrene, polyvinylchloride and ASA; and (ii) an underlying layer of PU foam that is itself sandwiched or embedded in the following sequence of layers: a solid thermosetting PU layer; a crosslinked PU elastomer layer; the PU foam layer; and a solid thermosetting PU layer. Benz et al disclose the uncrosslinked elastomeric adhesive layer of their 3-dimensional bowl-shaped body as being necessarily adjacent to the concave PMMA surface layer, rather than being separated from the PMMA surface layer by an intermediate layer of thermosetting polyurethane.

In light of the preceding remarks, Gilman and Benz et al, either alone or in combination do not disclose or suggest the article of Applicants' claims. It is respectfully submitted that the rejection appears to impermissibly use Applicants' application as a blueprint for selecting and combining or modifying the prior art to


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arrive at Applicants' claimed invention, thereby making use of prohibited hindsight in the selection and application of that prior art. To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-313 (Fed.Cir.1983). One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. *In re Fine*, 837 F.2d 1071, 1075 (CAFC, 1988).

In light of the preceding remarks, Applicants' claims are deemed to be unobvious and patentable over Gilman in view of Benz et al. Reconsideration and withdrawal of this rejection is respectfully requested.

In light of the amendments herein and the preceding remarks, Applicants' presently pending claims are deemed to meet all the requirements of 35 U.S.C. §112, and to define an invention that is unanticipated, unobvious and hence, patentable. Reconsideration of the rejections and allowance of all of the presently pending claims is respectfully requested.

Respectfully submitted,

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